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Subject: Morning Clips

Feds Unveil Garfield Superfund Site's \$37M Cleanup Proposal, but Funding Not Certain

The Record By: Scott Fallon May 9, 2016

It will take at least 30 years and \$37 million to clean the chromium-contaminated water that has sat for decades under a Garfield neighborhood, according to a plan unveiled by federal environmental officials Monday.

But because there is no money yet dedicated for the project, it is unknown when work would start at the Superfund site. That means the cleanup will likely be added to a national waiting list to receive taxpayer funding.

"The polluter is defunct and therefore the Superfund program will have to come up with \$37 million to cover the cost of the clean-up," said Judtih Enck, a regional administrator at the U.S. Environmental Protection Agency. "Given the limited resources in the Superfund program, this is going to be a real problem in the years ahead."

U.S. Sens. Cory Booker and Bob Menendez have pushed to reinstate a special tax on chemical and oil companies to fund Superfund projects like Garfield, but those efforts have gained little traction in Washington.

Still, EPA scientists on Monday were optimistic that their plan to combine two cleanup methods will eventually rid the community of cancer-causing chromium that has been found in more than a dozen basements in the city's southwest corner.

The neighborhood became polluted following a 1983 spill of more than 3 tons of chromium into the ground from a holding tank at E.C. Electroplating, a small, family-run business on Clark Street that put chrome-plating on machine parts.

The state Department of Environmental Protection allowed E.C. Electroplating's contractors to halt cleanup efforts in 1985 even though only 30 percent of the metal solution had been recovered and evidence showed it was migrating towards the Passaic River under the neighborhood.

Since then, chromium has spread across the southwestern corner of the city, with dangerous levels detected in the basements of several homes and businesses after flooding. Those properties were cleaned by EPA contractors. Drinking water for the city, however, comes from wells in Elmwood Park and has not been affected.

When the neighborhood was added to the federal Superfund list in 2011, the site's borders were set at Van Winkle Avenue to the north, Sherman Place to the east, Monroe Street to the south, and the Passaic River to the west. But the plume has migrated under the river into the city of Passaic, although it is deep enough not to be a health concern, officials have said.

No illnesses among residents have officially been linked to the contamination, but the federal government considers chromium a "serious threat to human health."

While the EPA has spent \$5 million demolishing the electroplating plant and removing 6,850 tons of contaminated soil and concrete in recent years, the groundwater cleanup is considered a long-term remedy that will take at least three decades to complete.

The plan released Monday calls for contaminated water directly under the former E.C. property to be pumped to the surface and treated at a plant built on the site. The clean water would then be injected back into the ground or discharged elsewhere.

The EPA would also dig wells on the property and throughout the neighborhood to inject a non-hazardous substance like emulsified vegetable oil that has been shown to break down dangerous hexavalent chromium to its less toxic cousin, trivalent chromium.

EPA scientists have leaned toward combining methods after a pilot study of the second treatment — called in situ bioremediation — came back with mixed results. It reduced the concentration of hexavalent chromium by 99 percent in a well on the outer edges of the former plant. But levels dropped only by 25 percent in another test at the former plant's footprint where chromium concentration is more than double that of other areas.

The plan would require injections every three years for at least the first 10 years. Well locations have not yet been chosen. If the EPA chooses the plan after reviewing public comments, the agency and the Army Corps of Engineers would then develop a design plan with technical details.

Rich Puvogel, an EPA official who has worked on the site for years, said the combination of methods is fairly unique for a Superfund site.

"We have a lot to learn as we move forward with this," he said. "At each site we make a preferred choice. We think the combination is the best one."

Designing the cleanup will take about two years. There is no funding yet after that step.

Garfield would then compete with about 25 to 30 other shovel-ready Superfund sites nationwide for funding. Only one or two new sites have been granted enough money to start a cleanup in recent years, said Walter Mugdan, who oversees Superfund cleanups in New Jersey and New York.

Mugdan said his team will likely make the argument to a national EPA panel that Garfield deserves funding because chromium poses an imminent health risk anytime it seeps into a basement.

It will cost \$14.1 million to construct the treatment plant and dig wells throughout the neighborhood, according to the plan. It will cost another \$23.2 million to operate and maintain the system over three decades.

Contaminated groundwater deep in the bedrock under Garfield and Passaic will be addressed in another cleanup, Puvogel said Monday.

The EPA will hold a meeting explaining the cleanup plan on May 19 at 7 p.m. at the Garfield Senior Center, 480 Midland Ave.

Written comments may be emailed by June 8 to Shane Nelson, the EPA's remedial project manager for Garfield, at nelson.shane@epa.gov.

\$37M Cleanup Plan for Garfield Chromium Unveiled

NJ.com By: Myles Ma May 10, 2016

GARFIELD — Federal officials unveiled a plan Monday that will take at least 30 years and \$37 million to clean the chromium contamination from water under a Garfield neighborhood, though there is no money yet dedicated for the cleanup, The Record reported.

Chromium has been leaching into the soil near the former E.C. Electroplating plant since a spill in 1983. The plant ceased operation in 2009.

Chromium has since spread across the southwest corner of Garfield, with dangerous levels detected in the basements of homes and businesses after floods.

The federal Environmental Protection Agency has spent \$5 million to demolish the plant and remove contaminated soil from the property, but officials have said they don't have the funds to finish the job.

The cleanup plan unveiled Monday would pump contaminated water to the surface to be treated at a lab on-site. It would also dig wells on the property and throughout the neighborhood to pump a non-hazardous substance like emulsified vegetable oil that would break down the toxic hexavalent chromium to a less dangerous form.

The EPA will hold a meeting to explain the plan May 19 at 7 p.m. at the Garfield Senior Center, 480 Midland Ave.

How an Old N.J City with Water Problems Avoided Becoming Flint, Michigan

By: Jessica Mazzola May 2, 2016

EAST ORANGE — Three years ago, before the country focused on Flint, Michigan for a water crisis that exposed thousands of children to elevated levels of lead, a New Jersey city was making headlines for a water catastrophe of its own.

Two water officials in East Orange were indicted on charges that they knowingly hid elevated levels of toxins in the city's water supply. The state Department of Environmental Protection intervened to control and monitor a remediation of the water supply. About 80,000 people were exposed to elevated levels of an industrial solvent that has been linked to potential cancer risks.

But, leaders of the 153-year-old city say they were able to avoid becoming the next Flint, thanks to the foresight of East Orange's founders, and a healthy influx of funding to overhaul its water system. Since 2014, the city has spent about \$15 million on capital projects to improve its water system, and is planning another \$22 million worth of renovations in the coming years. The fixes, Public Works Director Christopher Coke said, were able to happen swiftly and effectively, because of the century-old water system in place.

SETTING THE STAGE

The story of East Orange's water supply, Coke said, is as old as the city itself. The city is one of the few in the state, he said, to own and control its own wells, which are located in nearby Short Hills and Florham Park. The town's founders purchased the land and set up the independent system around when the town was founded in 1909.

"These guys were really innovative and forward thinking," Coke said, noting that the fixes being made now are possible because the town owns its own water supply. "We're not dependent on anyone else for water."

The system suffered a staggering setback in 2013, when elevated levels of the chemical solvent tetrachloroethene were found in the water, and top city officials admitted to falsifying test results that made the water appear safe to drink.

Much of the fallout from the East Orange water crisis fell into the lap of the then newly-elected Mayor Lester Taylor in 2014. The mayor replaced most members of the East Orange Water Commission.

The commission's former assistant executive director William Mowell was sentenced to three years in jail after pleading guilty to charges relating to a scheme to hide the water contamination, and the city settled a lawsuit with an employee who claimed he was ordered to carry the scheme out. With the city's eyes now on continuing improvements, "that chapter is closed," Coke said this week.

ROAD TO RECOVERY

In the wake of the scandal, the city was required to enter into an Administrative Consent Order with the state Department of Environmental Protection, which now monitors the city's water quality and system renovation progress on a quarterly basis.

"They are in compliance," DEP spokesman Bob Considine said last week.

"Sampling continues on a weekly or more frequent basis and the running annual average for the contaminant of concern, tetrachloroethylene, remains below the maximum contaminant level."

As part of the agreement, an interim operation, which includes the city supplementing its supply with water purchased from Newark, was put in place while East Orange rehabbed its own system, officials said.

Construction happening now includes the installation of airstrippers, which remove volatile organic contaminants from the water supply, and complete well rehabilitation.

After this phase is completed at the end of this year, the water commission will request the city council bond another \$22 million for additional work, including new piping, measures that will make water delivery more efficient, and the addition of an emergency generator that could run the system in the event of a prolonged power outage.

The scandal, officials said, served as a wake up call that they acted upon quickly.

"Since I took office in 2014, the East Orange Water Commission has made a substantial financial investment to improve and modernize our aging water infrastructure," Taylor said, calling the city's management of the rehabilitation "aggressive."

The renovation may also increase the capacity of the system, Coke said, from its current level, which carries about 10.3 million gallons of water per day. The city has a contract in place through the end of the year to supply water to its neighbor, South Orange. After that expires, the capacity increase could allow the city to sell water to other municipalities, officials said.

Some of the improvements being made, the second round of which should be done by 2020, were mandatory, Coke said. But, some were voluntary.

"We stepped up," he said. "We have more testing; we stepped up our level of employee training. ... Inaction is what caused a lot of the (past) issues."

WHAT ABOUT LEAD?

Flint is not the only city that has reignited national attention on lead. In March, East Orange's neighbor, Newark, reported that thousands of children in the state's largest district were being exposed to elevated levels of lead at school. The revelation prompted East Orange officials to work with the city's school district to run its own tests.

Samples taken from all 22 public schools, the district administration building, the city's water supply, and the supplemental water purchased from Newark, reported results below the federal safe levels of lead and other contaminants, officials said.

The district will continue to work with the city to monitor levels, and address any issues that arise, officials said.

"My board colleagues, the administration, and I are very happy with the positive outcome," East Orange Board Of Education President Bergson Leneus said in a statement.

"However, we will not rest on our laurels. We are committed to being proactive and strictly monitoring these potential issues in order to safeguard our children, staff and families."

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